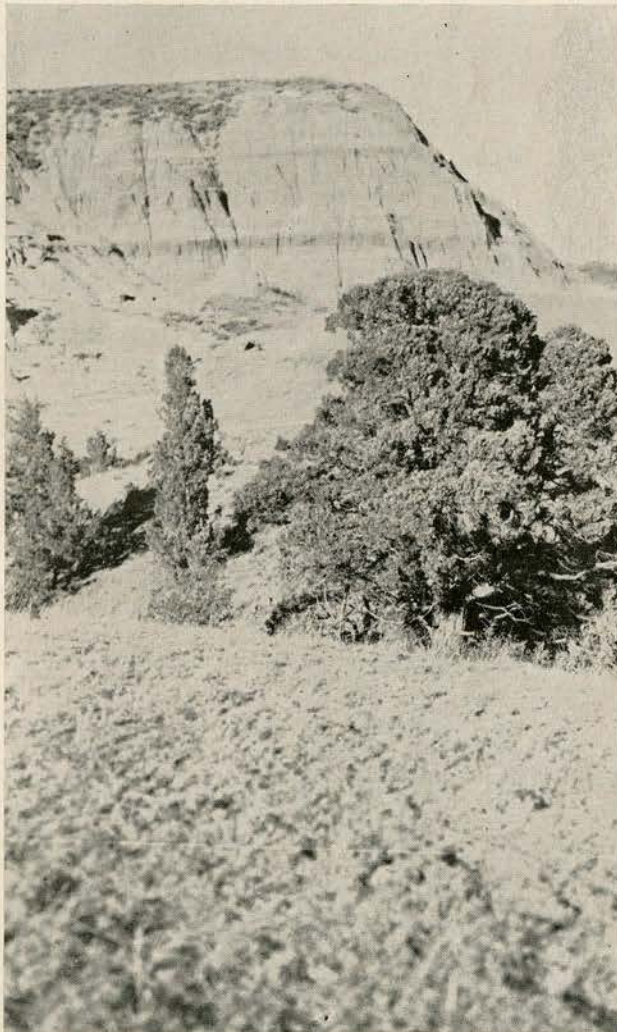


NORTH AND SOUTH DAKOTA HORTICULTURE

*South Dakota State
College Library*

JULY, 1944



Showing Different
Forms of
Cedars



Picture taken in
N. D. Badlands
Near Medora

We hope all that can will attend our annual meeting at Vermillion, August 23rd. and 24th.



THE ALDER FLYCATCHER

By

O. A. Stevens, Fargo



O. A. Stevens

My first experience with this bird was at Park River, North Dakota, about ten years ago. While exploring a swampy spot well grown up with brush, I heard an occasional call, "ze-beer." After some search I traced it to a small gray bird closely resembling the least flycatcher (see July, 1941). Later, on consulting the books, I decided it was the alder flycatcher.

Since that time I have seen them frequently. They seem to arrive late in May and one can usually find them among the willows in a swampy area. One writer who has studied the birds in Massachusetts agrees well with my observations. He mentions alders and wild rose bushes as the usual shrubs. Writers from Ohio and Iowa refer to dry upland pastures which are well covered with bushes.

The nests are placed in various bushes, two to four feet above the ground or sometimes higher. They are built of grasses and fibers from old weed stems. The eggs are about three-fourths of an inch long, creamy in color with streaks and spots of brown around the larger end.

As with other flycatchers, the food is almost entirely insects. Beetles, wasps, flies and bugs are the chief items. Small fruits of different kinds are eaten to some extent.

The alder flycatcher was first described by Audubon from specimens secured along the lower Arkansas River. His drawing is labeled "Fort of Arkansas, April 17, 1822." The birds are widely distributed, nesting from Arkansas and Kentucky to northern Ontario, Manitoba, even to central Alaska. In winter they are found from southern Mexico to Columbia and Ecuador. The birds from the Pacific Coast east to central Wyoming are regarded as a separate race of the same species.

The small flycatchers are difficult to identify. Differences in size, form and color are so slight that they can scarcely be recognized except by an expert on comparison of specimens. Differences in call notes are commonly regarded as the best means of identification. One version of the alder flycatcher's call is "ezee-e-up" (accent on last syllable) which seems quite suggestive to me. Another rendering is "a rather explosive fle-be-o" (accent on second syllable), which is reasonably

Vol. XVII.

July, 1944

No. 7

Entered as second class matter at the Post Office at Sioux Falls, South Dakota, under the act of August 24, 1912. Original office of entry, Pierre, South Dakota.

Membership in the South Dakota State Horticultural Society is one dollar per year; fifty cents of this amount is for the subscription to "North and South Dakota Horticulture." The subscription rate for affiliated organizations is twenty-five cents per member, per year.

Published monthly at Sioux Falls, South Dakota, by the North and South Dakota State Horticultural Societies. Address all communications to W. A. Simmons, Secretary, Horticultural Office, Court House, Sioux Falls, So. Dak.

SOUTH DAKOTA OFFICERS

Dr. N. E. Hansen, President Emeritus	Brookings, S. D.
H. J. Donaldson, President	Sioux Falls, S. D.
Geo. W. Gurney, Vice President	Yankton, S. D.
W. A. Simmons, Secretary	Sioux Falls, S. D.
H. N. Dybvig, Treasurer	Colton, S. D.
Mrs. F. Briley, Librarian	Mobridge, S. D.

MEMBERS OF THE EXECUTIVE BOARD

E. A. Gates, five years	Rapid City, S. D.
F. X. Wallner, four years	Sioux Falls, S. D.
Dr. S. A. McCrory, three years	Brookings, S. D.
J. C. Anderson, two years	Eden, S. D.
J. B. Taylor, one year	Ipswich, S. D.
Mrs. G. M. Jorgensen, Garden Club	Dell Rapids, S. D.
Mrs. E. T. Michels, Garden Club	Vermillion, S. D.

NORTH DAKOTA OFFICERS

P. R. Owens, President	Grand Forks
W. P. Baird, 1st Vice Pres.	Mandan
Mrs. H. O. Sauer, 2nd Vice Pres.	Devils Lake
H. A. Graves, Secretary	Fargo
E. L. Shaw, Treasurer	Fargo

TABLE OF CONTENTS

Page

The Alder Flycatcher, O. A. Stevens	98
Newsletters, H. A. Graves	99
Garden Club Gleanings, Mrs. G. M. Jorgenson	100-101
Manitoba News Letter, W. R. Leslie	102
Garden Notes, W. E. H. Porter	104
Hort'l Experiences, A. C. Ellerman	105
Robertson Memorial Park, H. R. Woodward	106
Fruit and Vegetable Notes, F. X. Wallner	107
The Viburnums, Dr. L. C. Snyder	108
Secretary's Corner, W. A. Simmons	109
President's Corner, H. J. Donaldson	110
More about the Rose Bug, A. L. Truax	110
Winter Injury to Strawberries, Dr. S. A. McCrory	111
Cedar Variation, F. L. Skinner	112

close to my ze-beer. They are quite shy birds, keeping well out of sight during the nesting season. They are said to be very difficult to approach when on the nest.

A hick town is one where there is no place to go where you shouldn't.—The Earthworm.



NEWSLANTS

By

Harry A. Graves, Fargo



H. A. Graves

Lilacs, in part of North Dakota at least, were not at their best this year. In spite of bloom somewhat under par, they were an eyeful. At Fargo, we had a night or two with several degrees of frost after the lilac buds were pretty well developed. Frosts which occur at this stage of the development of lilac buds often don't kill the buds, but the effect of the frost is apparent as they bloom. The blooms have almost as many florets per panicle, but both florets and panicles are smaller and less luxurious. This condition was common here this year with few exceptions.

About a year ago now, I listed my 10 favorite lilacs of the ones I had seen in bloom. Observations this year have not moved me to want to remove any of these ten from the list. Rather I feel I must add a variety or two. This spring I have seen Victor Lemoine for the first time. A. M. Brand told us at our 1940 meeting in Fargo that when Victor Lemoine is good, it is surpassed by few, if any, other varieties. After seeing a specimen of this variety in fine form this year, I am inclined to agree. This particular bush was set in 1941—an 18 to 24 inch bush. This season, it had close to a dozen large panicles of bloom. Dr. Nelson's Dianne, the dwarf single, reddish in color, was good again this year. It seems to be very dependable. It is now being propagated and should be listed by nurseries soon. Mms. Maxine Coon, a single blue in a striking shade, caught my eye this year as did Hugo Koster, a mauve single. Everyone interested in ornamentals should make a start with one of these good named ornamentals.

While on the subject of lilacs, let me suggest a worthwhile hobby to anyone interested in raising plants from seed. Lilac seed collected from any of the better hybrids will yield seedlings of a wide variety of types and color. Seed planted in 1939, taken from Vulcan and Mme.C. Perrier, has given an interesting group of seedling blooms. Many bloomed in 1943—four years from seed. One of the seedlings of Vulcan looks much like Victor Lemoine but more reddish in bud. Lilacs come from seed about as readily as radishes.

Western North Dakota in June is a sight to behold. Several Penstemons, large masses of *Astragalus bisulcatus* and loco are seldom out of

sight. This June (I think), I found something quite rare in a pure white flowered loco. The normal color for the loco is purple. I have heard of, but never seen, yellow flowered specimens. Just how rare this white loco plant is cannot be decided until Prof. Stevens and his extensive file of plants are consulted.

Our Jackson and Perkins floribunda roses came through the winter in fine shape. They were mounded and covered with mulch according to instructions, but the lack of a snow blanket for much of the winter caused us some concern. We were relieved to find 100% survival. E. S. Boerner, of the Jackson and Perkins Company, told me last fall that not covering soon enough in the fall is where many folks lost their floribundas. We have Pinocchio, Summer Snow and World's Fair in the named varieties, plus six numbered seedlings. Out of two plants of Brownell's Orange Everglow, we saved one which is very vigorous. Wonder why the second failed to survive with the same care? This variety, Orange Everglow, is reputed to be an everblooming climber of no mean quality. We shall watch it with interest this summer. It was well budded on June 5th when I left headquarters on a two weeks' field schedule.

The planting phase of North Dakota's 1944 Victory Garden Program is pretty well under the bridge as this is written. Utilization and preservation in its many phases, of course, lie ahead. North Dakota made widespread use of a large Victory Garden Poster, special Victory Garden leaflets, news and radio. Our June Progress Report presents the following summary: More city gardens in 1944; as many farm gardens as in 1943. County Extension Agents believe every farm family will have a good garden this year, barring accidents. Cities appointed special Victory Garden Committees or a Victory Garden Chairman. These Victory Garden leaders concentrated on making community plots available. Junior Garden Programs were set up in several cities aimed at more vegetables, as well as helping control juvenile delinquency. A survey of three large seed houses on June 1, indicated garden seed sales about 12% under 1943. Gardeners have been buying seed much more carefully this year, which we feel explains part, if not all, of this lag in seed sales. Southeast North Dakota was too wet for good gardening up to June 1. Considerable seed was still being sold when the survey was made.

Northern Great Plains horticulture was dealt a blow recently when the University of Manitoba announced the resignation of Dr. Sam Edgecombe. Dr. Sam came to Manitoba as Experiment Station

(Continued on Page 110)

July
1944

GARDEN CLUB GLEANINGS

By

Mrs. G. M. Jorgensen, Dell Rapids

President's Message

June 12, 1944

Dear Federation Members:

Nearly a year has elapsed since our first meeting in the beautiful park pavilion in lovely Dell Rapids, when we pledged ourselves as a group, to create a new state organization for South Dakota, and a most important organization, too.

Little did we realize then, that our little group, in one short year, would attract national attention.



Mrs. Jorgensen

Dear Fellow Members! It is my great privilege and pleasure to announce to you, that Mrs. E. Wesley Frost, of Fayetteville, Arkansas, National President of the National Council of State Garden Clubs, and Mrs. Walter Stadel, of Topeka, Kansas, Rocky Mountain Regional Vice-President of the National Council will both be with us during our first annual convention, which will be held here in Vermillion, August 23rd and 24th.

Seldom is it the privilege of a State Federation to be guided during its meetings by a Regional Vice-President. Perhaps never again in our history will we have the honor of being addressed by the National President of the National Council. They will be a personal inspiration to all who attend, and I feel I should be very remiss in my duty, if I did not urge each and every one of you to come. You will be repaid in many, many ways.

Mrs. Frost and Mrs. Stadel will deliver short talks to us during our afternoon session, from one until three o'clock, on the first day. Following the annual dinner, which will be held at 6:30. Mrs. Frost will lecture on "Victory and Peace."

In her honor, this will also be the theme of our first annual convention.

Every Garden Club delegate and officers of the Federation are especially invited to attend a special meeting which is to be held at 11 A. M. on the 23rd.

We are destined as leaders in South Dakota, to play a personal part in the formation of a great organization. If we realize the debt we owe to Mr. Donaldson, president of the State Horticulture Society, for his initiative and energy directed toward aiding our group, I know we will not fail to come.

If your city does not have an organized Garden

Club, and if you are interested in forming one, we cordially invite you to come to our convention, which will be held jointly with that of the State Horticultural Society. Their president is planning a most informative program, too, which you will also enjoy. The Vermillion Garden Club too is planning to make your visit here an interesting one. The exchange of ideas through personal contacts with other members, each with similar problems, will create for you a "Federation Friend."

All communications relative to the Federation convention may be addressed to me at Vermillion.

Faithfully yours,

Gertrude Michels.

* * *

Come To The Convention

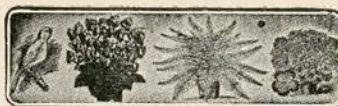
To Mrs. Michels' plea, let me add my own admonition to make a special effort to attend this conference. The fact that these national officers are interested enough to come to our convention is due wholly and entirely to her efforts, and to her faith in the loyalty and interest of every individual in this Federation. Plan to go to Vermillion August 23 and 24.

Don't forget that five year membership in the South Dakota Horticulture Society which is waiting to be presented to the artist whose seal design is chosen as an emblem of the Federation. The design will be chosen and the prize winner announced at the convention.

We Are Fourteen

Our hats are off to June Harter of the Lazy H Bar Ranch at Highmore this month for she brings another garden club into the Federation to make us fourteen strong. Out there, gas rationing means more than a walk to the corner grocery, but Mrs. Harter managed somehow to organize a club for regular meetings, and has sent in dues for twelve members, adding hopefully, "so far".

In a state which encompasses plains and forests, mountains and rich farm lands, the problems of horticulture must necessarily be as different as are the varying conditions, so we are particularly happy to welcome this new club from the wide open spaces. Two major handicaps against gardening are grasshoppers and drouth, but Mrs. Harter is enthusiastic about her many rapidly growing delphinium and other perennial seedlings and promises to tell us next fall whether her plans for combating these subversive influences have been successful. She says: "I certainly like the Blizzard Belt Gardener because it gives gardeners such an excellent opportunity to express their opinions." We'll be looking for some



valuable data for the Gardener from our Highland Lassies. Mrs. Donald Sunding is secretary-treasurer of the club.

Year Book Contest

I'm glad I don't have to decide which of the year books we've received this year is the best; but committee workers who will be making booklets for next year should jot down topics, projects, poems and other ideas as they come across them, because we are going to have that contest we mentioned a while ago. Don't forget we have sample year books on hand which may suggest other ideas to use. Yearbooks for 1944 have still been coming in; one club beginning their year in October and one on May 15, so it is evident that there is no uniformity as to the club years at all. For this reason the contest will begin in October and be allowed to run over six months at least, possibly to June 1, 1945.

We mentioned the Wednesday Garden Club year book last month but that was evidently for the growing season of 1943, as their new book dates from May 15, 1944 to May 1945. A project is no sooner said than done with them, for they increased their membership from fourteen to nineteen in the last month. Program topics in this book indicate that much thought was spent by the committee in choosing a definite problem in home ground beautification, one topic bearing toward the esthetic in nature, and one of general interest or travel for each month of the year. They have been careful to confine the subject within narrow limits to make it still more interesting. A few titles that illustrate this point are, How to Water, Trouble Made by Ants, Activities Observed in Birds, Fitting House Plants to Windows, The Use of Lombardy Poplar, The Whys and Whynots of Chinese Elms, The Malignant Cottonwood, and The Poppies of Holland. Other programs that I would like so much to hear, are: The Big Four, Tropical Blossoms, Three Hundred Peanuts, Birthmonth Folklore, Foods Grown 2000 Years Ago, Paw Prints, Woods Used in the Making of Furniture, San Francisco Bay, Trees Grown in Italy, and Leaf Arrangement. It is evident that this club has passed beyond the basic essentials of garden processes. Another feature of the book is several pages of poems, and this bit taken from their poem for the year:

I work in my garden for sight and smell
Of dark, rich earth that crumbles as I go
From flower to flower ----.

Flower Shows

Big June news among several of the clubs is the flower show. Vermillion and Sioux Falls held theirs on June 10, and as we progress farther

north, Dell Rapids and Brookings set their dates on June 14 and 17 respectively. Dell Rapids has as its big drawing card for peony growers, a silver loving cup donated by Guy Neher and W. F. Voy, which is awarded to the grower of the best peony in the show each year.

Sioux Falls Garden Club's show drew 270 entries with F. X. Wallner, our vegetable man, carrying home many of the best prizes on flowers. Dr. John Donahoe grew the best peony of the show. One of the outstanding attractions was a rock garden display. Mr. H. N. Dybvig and daughter Mildred were the capable judges for both these shows.

Short Shorts

Centerville's Mrs. Geo Weeks knew whereof she was speaking when she spoke on "Grow Dahlias and Brag," as she raises some fine blossoms of that kind herself. Sioux Falls Garden Club deserted their usual meeting place to accept an invitation to the home of Mr. and Mrs. C. W. Heinson, and gain a peek at the lovely garden and lily pool there. Mr. Heinson has collected curious stones from many places so that every rock around the pool has some element of distinction. South Sioux Falls program for early June included talks on garlic and tomatoes; with a flower naming quiz conducted by Mrs. Margaret Berry. Mrs. Ferris and Mrs. Clarence Freed were the bright people to win prizes in the quiz. At Brookings, Elton Shank says he has fifty varieties of iris in bloom and all set for inspection when the garden club makes their first tour of the season. Mr. Shank has many of the newest iris varieties such as Elsa Sass, Great Lakes and Mohr seedlings.

Flandreau's Green Fingered ladies are leading the way in a new effort to attract the attention of the general public to growing things. Mrs. Wm. Neptune, president of the club has evolved a plan which will put a display of flowers in a down-town show window every week end all summer, members will be appointed to arrange the display each week, the first exhibit being made by Mrs. Duncan and Mrs. F. J. Cherney. These were displayed in the window of Mr. Orvedahl's furniture store with a placard reading, "Compliments of the Green Fingers Garden Club". That is a plan worth trying where the clubs have not yet attempted a flower show.

The Flandreau report also says. "We had a fine lesson on "Plants Worth Knowing," one of which was creeping pink phlox. Camla, and a yellow baby's breath with an unprouncable name". Page Mr. Porter for the gysophila. I've never heard of a yellow one.



MANITOBA NEWS LETTER

By

W. Y. Leslie, Morden, Man., Can.



W. R. Leslie

French lilacs have blossomed profusely in May. This class of large shrubs is so widely popular that the Morden Experimental Station will devote several letters to them. The consideration of the present is that of after-flowering treatment.

In studying individual lilac bushes you note that there is often a marked difference in the truss, and its individual component flowers or florets, in a 10-year-old bush, and those of the same variety on a vigorous 3, 4, or 5-year-old bush. The old specimen may have more abundant bloom but unless pruning has been done the blossoms tend to be small and commonplace. The young specimen may have spikes which are twice as long and much more attractive. The untended old bush that has become dense with surplus stems, and allowed to retain all its early, aged main shoots, is likely to be disappointing.

Some few varieties tend to retain most of their characteristic beauty even when more or less neglected. Examples of such are Mme. F. Morel, Ludwig Spaeth, and Mme. Lemoine. However, most of the choicest aristocrats of Lilacdom demand a little annual attention, if they are to unfold their May-time blossom pagentry in fully typical manner. Now is the time to thin out lilac bushes as the flowers fade.

Cut out the aged stems down close to the ground. Try to retain six to nine vigorous main branches in such a way that there will be a balance to the bush. Encourage two or three new shoots to arise this spring from near the ground. These are to replace two or three old stems that are destined to be pruned out a year hence.

Snip off all flower stems as soon as the flowers fade out. This will conserve plant vigor. The production of seed is a heavy drain on plant vitality and should be avoided. Encourage a heavy growth of foliage so that food reserves be built up and stored in the stems and roots for next season's growth and blossoming. Old bushes may benefit from applications of barnyard manure or ammonium phosphate.

We must recognize that the successful culture of lilacs includes being well fed and well groomed as well as well bred. In this they differ little to

a dairy cow, a race horse, or a strawberry patch. The chore of June care is simple. It involves removal of aged stems near the ground, cutting out surplus new stems and beheading flower stalks as soon as petals fall.

Lilac Hill at the Morden Station was a scene of glory in late May. A few impressions of several top-notch varieties follow:

Thunberg, introduced by Lemoine in 1913, was a stately beauty. Although classed as a lilac color, it has bright rose tints. At a distance the effect is a lively reddish one. This is particularly so if the sun shines on the other side of the bush from the visitor. This late bloomer emits a sweet spicy fragrance.

Paul Thirion, classed as magenta, is one of the most reddish among double lilacs. It is a prosperous-looking variety with numerous large trusses, each loaded with fat double flowers, which in young stage suggests small roses. Flowers are scented and remain in condition a long time. **Paul Deschanel** also is a select sweetly scented double rosy-purple variety.

Marechal Foch and **Mme. F. Morel** are very handsome, large, single, reddish-purple, or magenta, varieties. Both are tall-growing bushes.

Montaigne is a charming pink, double, sweetly scented, and remains in fresh appearance until the petals fall. It is even more dependable than its rival Mme. Antoine Buchner. Both are of top excellence.

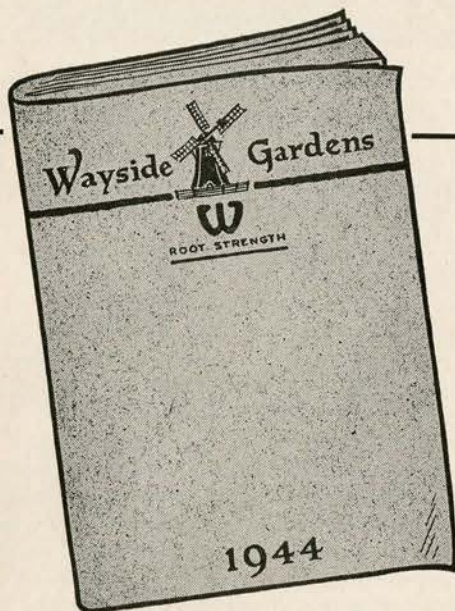
Lucie Balet is the clearest pink among the singles. It produces its flowers in most prodigal degree all over the bush. Fragrance is mild.

Violeteta is appropriately named. The generous clusters of large flowers suggest big clusters of English double violets. Fragrance is of medium strength. Color and shape of flowers are retained well. A choice dark durable lilac. **Marechal Lannes** is placed in the same color class but is very different in form, color and fragrance. It becomes bluish and carries a pleasingly rich perfume.

De Miribel is rated highest among single varieties of violet shade. Flowers are plentiful, bold, heavily scented and retain their deep coloring. This variety is distinctive on the landscape. Many other dark violet singles soon fade in the sun into dull dusky or pale hues.

Edith Cavell, double white, with a rating of 9.2, has the highest score of all lilacs in the 1941 Survey of the American Association of Botanic Gardens and Arboretums. Flowers are large, shapely and sweetly scented. **Ellen Willmott** is more classic in floret form but is less robust and milder in fragrance. **Princess Clementine** is pos-

(Continued on Page 112)



Send For This New, Instructive *Garden Hand Book*

New hardy plants. New flowering shrubs. New roses. Contains more than 2000 different items. All new flowers are shown in true-life colors. By far the most complete garden reference book in America, with ample cultural directions.

Included in this big 184-page book-catalog are such famous offerings as Weigela Bristol Ruby, an unusually hardy shrub and a profuse bloomer, and the Philadelphus varieties—fine, upright bushes with immense blooms and delightful fragrance.

To pack into this handsome Book-Catalog all the detailed information and cultural advice sought by our customers resulted in something way beyond the usual catalog.

That is why, in view of limited quantities, it will pay you well to send for this outstanding instructive book at once. To be sure of your copy, it is necessary that you enclose with your request 25c in coins or stamps to cover postage and handling costs.

*American Agents for Sutton's
Famous English Seeds*



Wayside Gardens

100 Mentor Ave.

MENTOR, OHIO



GARDEN NOTES

By

W. E. H. Porter, Hansboro, N. D.

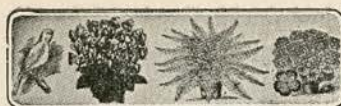


W. E. H. Porter

As July greets us with blazing sky, Sol's rays appear rather an affliction than benificent, but any of us who have surrounded our homes with beauty instead of permitting evil maturing weeds to dominate the scene, can enjoy to the full, nature's pageant of fragrance and color with Lychni, mallows, geraniums and delphiniums in matchless competition. Again and again we return to the larkspurs' blue spires, which seem to induce a subconscious feeling of what one might call sweet sadness, perhaps because like life and its pleasures, such beauty is all too transient. April 27th. The triumph of spring in gay apparel is now seen on every hand. Like our own native pasque flower already past its prime, large yellow cups of *Adonis vernalis* push thru the earth from seed sown 6 years ago. April 28th. White frost in morning followed by a tearing south wind and in evening, the season's first rain. April 30th. Intermittent 24 hour rains bring elms and boxelders into flower and leaf burst on caragana, flowering currant, choke cherry, lilac, and willow, also Wayside's flowering red leaf crab *Malus floribundus*. Noted first celandine in full bloom. May 4th. Altho freezing commenced long before sundown yesterday, no damage appears, not even a tender leaflet on the rowan tree, the one deciduous tree in full leaf. Heard and saw first mourning dove; the light powdering of snow still lingers at night fall. May 5th. Forlorn pintails and mallard drakes at 9 a. m. walking on home slough looking in vain for open water. May 10th. 82 in shade, took anti-freeze out of car; choke cherries break in leaf and flower bud. May 11th. Cooler with east wind and temp. at 58. My wife's old dog recovers from heat prostration; he is over 16 years old, that yesterday almost terminated his mundane activities and I have to treat him as a convalescing patient. Rain falls at 3 p. m., was delighted to find mixed with dandelions and trash, many seedlings, some with 4 leaves under branching of *Alyssum floribundum*: last fall my attempt to shell seeds from those obstinate pods was unavailing but winter storms did the trick. As bumble bees feed on willow catkins, spring flowers joyously greet us everywhere, hundreds of light pink fragrant

violet Jooii, our native violet, is rare by comparison, white penny cress and white and pink rock cress, butter yellow carpet of *Alyssum atlanticum* and all the color ranges of moss phlox, the first to show by many days being Barr's hoodi from the Black Hills. It is white with pink blush, a color much like fragrant large flowered *alyssifolium*, perhaps the most virile of all, sending out heavy stolons in all directions. This is also one of Barr's specials. May 12th. Cool and foggy, becoming very warm and sunny later, the barn swallows arrive. May 13th. Saw a thrasher in hurried flight. I read of the clover weevil without regret, sweet clover makes indifferent hay and can be a formidable weed, especially in a garden which it robs of all moisture and unlike other weeds cannot be pulled up, but has to be dug up and has an appalling way of scattering seeds and spreading everywhere. The deep and branching roots have certainly given our hard subsoil a good aerating but that is no longer necessary and the sweet clover honey is excellent, we can quite well get along without it and so God in his infinite wisdom corrects an unbalance of Nature. May 17th. Arkansas king birds are here and male boxelders have shed their pollen, drop their flower tufts and break into leaf, also true to form Wayside's *Spirea mongolica* is first shrub to flower, numerous small white stars on bare branches. Will's annual dwarf *convolvulus* from March sown seeds and set out two days ago, has a purple blossom on a 2 inch plant; indoors my blue lobelia also in flower, this is a hang-over from last summer's garden, dug before frost and during winter made slow, steady growth in cool room; tho here grown as a garden annual, a perennial doubtless in frost free climate. Cutworms are working on early garden, saw male redstart flitting thru caraganas near garden gate; snow white flowers adorn the Juneberry bushes in the grove. In the border foot high cinnabar flowers of *Lychnis coronata* add to the color pageant, this plant appears as a biennial in our latitude. May 21st. Our threatening rain of last few days of chill and cloud, at last materialized in a drenching shower from the west that beat up against an east wind. The 2nd and 3rd members of happy family to show up are Loder Park's bloodroot, a three leafed stem over night and Wayside's Snowflake, the former went completely dormant on its arrival last summer, but in contrast our snowless winter has worked havoc among the dianthi, casualties are at least 2 out of 3 of Wayside's specials and half or more of the hardy neglectus and all of some

(Continued on Page 110)



HORTICULTURAL EXPERIENCES

By

A. C. Ellerman, Yankton

My original hobby since early childhood has been the pioneering of rose culture in this blizzard belt area, starting it at a time when it was thot impossible to grow the better varieties here. It took time and patience over many years to ascertain the adaptability of many of the rose varieties suited to this particular area, but that the goal was reached is evidenced in my having developed one of the largest and finest rose gardens in the state. My limited space gave home to several thousand plants, numbering well over one hundred varieties. The drought period dampened my rose ambitions some, and even tho I still have some, my chief aims now are in the trial and development of fruit and berries.

My latest venture is in growing hybrid blueberries, but in this I find much preparation necessary. Our area is known to be strongly alkaline and the blueberry thrives only in soil on the acid side. I built up an acid bed, properly guarded against leaching from the outside and did enjoy some fruit, but I have found out, very definitely, that the culture would be unprofitable on a large scale unless there are areas within our state where the soil has a more acid tendency and the rainfall plentiful. Everyone interested in garden or fruit, even tho in a small way, makes discoveries that may prove of value to others.

Last fall, at a very late date, I prepared and planted a sizable strawberry bed. The mild winter brot this bed thru in fine shape, suffering but few losses. The idea spring weather strengthened the plants and practically all set fruit and my expectations were aroused. But my patch is very near to a sizable cluster of trees wherein many robins built their nests. Each morning, as I now observe, this patch is over run with robins, eating the berries as soon as the color starts to change. I thot this conclusive until I discovered something more and that was that the red squirrels are equally as destructive and this same grove of trees offered harbor for them, also. This is my first knowledge that squirrels will give any trouble to a berry patch.

Now having given over my rose love to that of fruit and berries, I learned very definitely the importance that our honey bee plays and its intuitions. Quite early after the fruit buds had become pronounced, I opened several to learn that the late frosts had gotten in their work and that the fruit crop would be very short. Irrespective of this finding, every tree with but few exceptions blossomed out as never before and all in-

dications pointed to a good fruiting season. By watching the operations of the bees, I discovered that they gave but little attention to these many fruit blossoms and the only reason that I could deduce was that there was something lacking to their interests and so it proved to be. Therefore, an early spring indication of fruit is very dependent upon the activities shown by the honey bee and I have, to date, found no better indicator.

Apparently the bloom would form but lacked the nectar and as a result, it was impossible for fruit to set properly. A few sheltered buds did make the grade. This is true of the more early varieties of plum, apples and cherries, the late flowering varieties doing somewhat better. I trust that these findings may prove of some value to others who are anticipating fruit and berry culture. If you want a good crop, keep the berry patch at some distance from dense trees that might give haven to the robin and squirrel.

Keep Your Library Up-To-Date With These IMPORTANT BOOKS

SOYBEAN CHEMISTRY AND TECHNOLOGY

By Klare S. Markley and Warren H. Goss
Fully Illustrated - \$3.50

A timely book to meet the tremendous demand for up-to date facts covering the chemical and technical aspects of the versatile oriental soybean. The clarity and thoroughness with which it is written reflects the authors' wide knowledge, broad perspective and infinite patience for detail.

Contents: Composition and Properties; Mineral Constituents; Proteins and Other Nitrogenous Constituents; Enzymes; Carbohydrates; Glycosides; Pigments; Vitamins; Oil and Oil-Soluble Constituents; Processing Soybeans; Production and Refining Phosphatides; Processing Soybean Oil for Food Uses; Literature Cited.

CHEMICAL GARDENING

D. R. Matlin

\$2.25

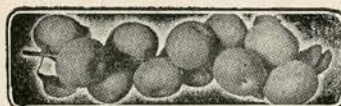
Describes in detail and explains the latest developments in the soilless culture of plants. It shows in a simple and practical way the methods of chemical gardening so that anyone, trained or inexperienced, can benefit directly from the book.

Contents: Value of Soilless Culture of Plants; Soilless Culture for the Home; Soilless Culture for Commercial Production; Principles and Methods of Water Culture; Chemical Gardening in Sand, Gravel, and Other Aggregates; Mineral Relationship to Plants and Animal Nutrition; Planting of Seeds, Bulbs and Cuttings; Art of Taking Care of Plants; Control of Insects and Plant Pests; Latest Developments in Chemical Gardening; Plant Pathology and Diagnostic Charts; Chemical Tests; Miscellaneous Tables.

Distributed by

NORTH AND SOUTH DAKOTA

Court House HORTICULTURE Sioux Falls, S. D.



REPORT ON THE ROBERTSON MEMORIAL PARK PART I

Bv

H. R. Woodward

The idea for establishing the Robertson Memorial Park dates from a meeting of the South Dakota Horticultural Society at Vermillion on January 16, 1935. The idea in the minds of the members was to set aside an area and place a monument thereon, dedicated to the great life and work of John S. Robertson, the retiring president of the Society that year and whose health and age at that time gave evidence that his work was nearing completion.



H. R. Woodward

According to Mr. W. A. Simmons, secretary of the society, the idea of establishing such a memorial originated with H. E. Beebe of Ipswich, Mr. Beebe contributed the wording for the bronze plaque which was placed on the large boulder in the park and dedicated by the Society on July 19, 1935. This rock was provided by the Hot Springs Chamber of Commerce and moved to the area sometime previously. It consists of granite shist which outcrops generally throughout the central Black Hills. The wording inscribed thereon is:

DEDICATED TO
JOHN ROBERTSON
HORTICULTURIST, POMOLOGIST
Pioneer and Friend
With Affection
By the
HORTICULTURAL SOCIETY
of
SOUTH DAKOTA

The county commissioners of Fall River county bought the land for the Society which was located on the land of the late Edward Hemminger and was located 4½ miles west of Hot Springs on Highway 18. The original quitclaim deed was turned back to the county auditor and is still held in that office. The description of the area is recorded as follows:

"A Tract of land known as ROBERTSON MEMORIAL PARK more particularly described as follows:

Beginning at the Southwest Corner of Section 20, Township 7 South, Range 5 East B.H.M. North 44 degrees 44 minutes east 469 feet to the Southwest corner of the proposed park, thence north 89 degrees 29 minutes east parallel with the section line 416.7

feet, thence north 31 degrees west 235.9 feet, thence north 44 degrees 14 minutes west 594.1 feet, thence south 665.5 feet to the place of beginning, containing 4.29 acres, more or less, being a part of the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 20, Township 7 South Range 5 East B. H. M."

In clearing up the title to the park, Mr. Robertson told the writer that he made final payment on the tract in order to make the title as clear as he possibly could and that he did this because he didn't want to put too much undue financial stress on the Society. While Mr. Robertson fully appreciated any and all honors bestowed upon him at various times, he often felt very humble about such things and often remarked that he hoped he was worthy of such. With all this feeling however, Robertson appreciated everything the Society did for him and he often remarked, "We will get nowhere in this world without the assistance of friends."

In 1937 Mr. Robertson passed away and his mortal remains were interred in the park just a few feet beyond the monument erected by the Society two years before. In 1937 the Society, assisted by the late W. C. Allen, editor and publisher of the Dakota Farmer, raised money from voluntary contributions to place a fence around the area. The response was good and enough money was raised to provide a woven wire fence about four feet high, with three strands of barbed wire above it and attached to steel posts. This fence was duly placed around the park in the summer months of 1938 by Thomas D. Miller who did so under the supervision of and at the request of the Society. He did an excellent job and it is in good condition. It has two gates, one at the entrance to the park on the southwest and the other, a larger one, at the southeast corner opening upon the highway.

Mr. Robertson became ill in March 1935 after a trip to the eastern part of the state and suffered a slight stroke from which he never recovered. He died at Our Lady of Lourdes Hospital in Hot Springs on July 28, 1937, at which time he was 71 years of age. His grave has been provided with a valuable concrete cover which rises only slightly above the level of the surrounding terrain upon which is a bronze plate upon which is the following inscription:

JOHN STEVENSON ROBERTSON
1866 1937
Eminent Farmer South Dakota
State College

From a Homestead to Who's Who in America
 "Nature is Honest with Herself."
 A Presbyterian and a Kiwanian



FRUIT AND VEGETABLE NOTES

By
F. X. Wallner



F. X. Wallner

May 21st. On my trip down to Yankton and back I saw more pheasants than ever, and a lake or two on every farm and not one field up so the rows could be seen. Plowing, harrowing and planting was going on tho it was Sunday. Ten days later, on Decoration day, most fields of corn were up and some cultivating was going on, while others were still planting. This second trip was to attend the Golden Jubilee of Monsignor Link's ordination. I showed the clergy the exact spot where Brave Bear was hung, just across the alley from the old school. Two elms are still growing in the parking of the old Court House that were planted about the time Bishop Marty brot elm, ash, boxelder and hackberry from the Missouri river bottoms and planted around the old frame church. They were surprised that I remember back to the early eighties and that Father was still living. I should like to have met some of the old schoolmates that were there, I talked with a few that I had not seen for 45 years.

This is the first year that the flea beetle has taken all radish plantings, also all field sown cabbage and damaged the large set plants. We did give them one dusting, but they have done much damage so that we have had no radishes up to June 4th. Good news comes from the boys; Paul writes that he drew a lucky number and is on his way home, while Francis is on his way across.. An unexpected call from the army camp on Decoration day for 139 bushels of spinach was a big job to fill, with no help except the few small boys from the orphanage, but they did get it gathered on time. We got the order only because the Kansas City office did not have it on time. There is an army of men taking care of the many beautiful lawns of the city, but not one to help in the gardens, so with the rainy weather in June, the weeds are getting control and we are abandoning much of the small stuff. The low lands, mostly river bottoms and peat beds are all flooded and many gardens were never planted, so I look for still less crops this fall than I forecast in the last issue.

June 18th. Another week of rain storms, hail, and no field work done, so a few others are see-

ing crop reductions far below last year. Weeds are the main worry in our gardens, also the fields thruout the country, that will be abandoned. Even small grain is going down, long before heading out. Our three rye patches that were allowed to ripen, are beginning to lodge and more rain this week would about ruin the crop. A promising patch of carrots, worth \$1000 or more, if well grown, may be plowed under if not cleared this week, also a patch of parsnips. Potatoes, cabbage, beans and corn and most all vegetables are beginning to show the effects of wet, soggy soil, but even yet, given a week of dry weather, we could do a lot to change the picture. The following release from the Dept. of Agri., telling how the California rice growers fool the weeds make one long to go there and engage in rice growing:

Rice fields of California—planted from airplanes nowadays—have not been injured by repeated planting to the same crop, until yields have declined. Instead there has been an increase, particularly gratifying in wartime, of about 10 bushels an acre in the average yields compared with the early plantings before scientists and rice farmers learned the methods of rice growing most effective under California conditions. For the 5-year period 1912-16 the average yield was just under 60 bushels to the acre, and for 1937-41 it was just under 70 bushels according to U. S. Department of Agriculture reports.

In part this gain is credited to the two improved varieties of rice Caloro and Colusa, selected from imported rice varieties by rice breeders at the Department's Rice Field Station at Biggs, Calif. Otherwise the larger yields are a result of years of practical experimentation in the mechanization of rice growing—changing from the old unlimited hand and hoe work to large scale and almost completely mechanized methods. In California mechanization of rice growing includes widespread seeding of the grain from low-flying airplanes.

Seeding from airplanes is indirectly the result of the American way of dealing with the problem of weed grasses. Early rice growers prepared a good seedbed, drilled the seed and flooded and later drained the fields to promote germination and a good stand. Under this method barnyard grasses invaded the fields to a point where the cost of hand weeding was prohibitive—\$3 to \$5 an acre. Experimental plantings showed rice would grow well in California on land kept covered with six inches of water, even though this method required about a quarter more seed. Ma-

(Continued on Page 111)



THE VIBURNUMS

By

Leon C. Snyder, Brookings, S. D.



Dr. L. C. Snyder

The Viburnums rank high among our ornamental shrubs. Of the 120 known species, about 20 are native of North America. Four species have been reported native in South Dakota. The Viburnums have many fine qualities and few, if any, objectionable ones. The shrubs have showy flowers, clean foliage, abundant and attractive fruit, highly colored autumn leaves, and a compact symmetrical habit of growth.

With all of these desirable features it is surprising that they are not more widely grown. Many of the species have been tested in the state and a goodly number have proven hardy and very desirable. There are, no doubt, a number of species that have not been tested that might prove desirable.

1. American Cranberry Viburnum (*V. trilobum*)

Van Dersal, in his book on Ornamental American Shrubs, describes this as one of the finest of our native Viburnums. It is very similar to the European species except for the smooth leaves. The shrub is native from New Brunswick to British Columbia, south to New York, Michigan, South Dakota and Oregon. In South Dakota it is found in rich valleys in the northern Black Hills.

This is a large shrub, 6 to 15 feet tall with 3-lobed, maple-like leaves that color well in the fall. The flowers are produced in early June in flat-topped clusters that may be 3 to 5 inches across. The outer flowers are large, sterile, white and very showy, forming a ring around the small perfect, central flowers. The fruits ripen by the first of September and resemble bright red cranberries. They may be used as a substitute for cranberries in preserves and sauces. Unless picked or eaten by the birds, the fruits stay on the bushes well into the winter. The plants thrive in poor as well as good soil, and are highly recommended for specimen shrubs or for mass effects.

2. European Cranberry bush Viburnum (*V. opulus*)

The European Cranberry bush Viburnum is very similar to the American species. It differs in its hairy leaves. The uses are

about the same, except that the fruit is inedible. Since the American species is native in this area it would seem wise to use it wherever possible.

3. Viburnum opulus clone, Common Snowball.

This is a sterile variety of the European Cranberry bush Viburnum. All of the flowers are sterile and form a showy white ball. The leaves are especially subject to aphid injury. This shrub is widely used as a specimen shrub.

4. Nannyberry Viburnum (*Viburnum lentago*); also known as Black Haw.

This is a very neat and attractive shrub, being native along streams in the Black Hills and locally over the state. The leaves are long and taper-pointed with a neat, glossy appearance. They turn red in the fall. The flowers are produced in large flat clusters in early June. These are followed by blue-black fruits which ripen in September. The fruits are sweet and relished by children and birds. The buds are long, taper-pointed and very conspicuous in winter. This shrub is very hardy and fairly drought resistant. It is being planted in wild life plantings around lakes and to a limited extent, in shelterbelts. It is also useful for yard beautification.

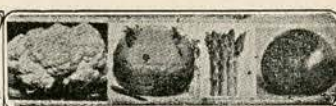
5. Wayfaringtree Viburnum (*Viburnum lantana*)

This delightful Viburnum is native in Europe and eastern Asia. This shrub has been sparingly planted in eastern South Dakota and seems perfectly hardy. The shrub is medium height and compact in outline. The leaves are hairy and wrinkled above, resembling Lantana leaves. The flowers are a creamy-white in flat clusters, followed by oblong fruits that change from red to black. The leaves turn red in the fall. This shrub deserves much wider use for landscape purposes.

6. Arrowwood Viburnum (*Viburnum dentatum*).

Our information on this Viburnum is definitely limited but what we have is all in its favor. It grows wild in Minnesota and eastward. Dybvig reports it entirely hardy in his nursery. The specimen that we planted a year ago this spring came through the winter in fine shape and is making a fine growth this spring. The shrub is compact and medium-sized. The leaves are deeply toothed and veiny. The flowers, borne profusely in flat-topped clusters, are followed by slate-blue fruits that are very attractive.

(Continued on Page 111)



SECRETARY'S CORNER

By

W. A. Simmons



W. A. Simmons

Mr. E. A. Shewell, Sioux Falls writes as follows: "Summer heralds its approach with the usual offering of a package of nursery disappointments for \$1, plus a few cents C. O. D. and delivery charges. The Postman delivers many catalogs from Tenn. to Michigan with many bargains in selected fruit trees and small fruit, all good perhaps in their native states, but the fact still remain that we live in the wind-swept plains of S. D.

Now we have some great men here, Dr. Hansen of Brookings, for one. Also from Minnesota and as far north as Morden, Man. Canada, are specialists in plant life who have devoted many years in propagating fruit trees that will live and produce in this climate. Many have passed the experimental stage and can be obtained from responsible nurseries in this section. One Haralson well rooted apple tree is worth much more than the doubtful growth of a Delicious or Winesap; a Waneta plum is worth more than any of the late Luther Burbank's hybrids, for this state. What we need most are men who can offer expert advice on planting conditions and what trees will bear and give fair returns on the investment. I have called on some people who were sold peaches and such, with the assurance they would grow; surely they will, the first year. I believe S. D. could be made, with careful selection, a good home orchard fruit country with possibly a small amount for market. The buying public should adopt the slogan STOP, LOOK AND LISTEN. The man who listens is the man who learns. Why not devote part time in your Victory Garden rally to short talks on planting and care of some hardy fruit trees and small fruits? They do not need planting every year and increase in value rapidly."

To those that received the Amaryllis for their plant premiums, and to others that grow this plant, the advice of Victor H. Ries, as to their summer care will be of interest. "Your amaryllis should have been kept growing after it finished blooming. Plunge the pots in a sunny place, or if you prefer, plant direct in the ground. Keep them growing all summer and fertilize once every 4 to 6 weeks. In mid to late September put the pots in the cellar and gradually let them dry up until you wish to take them upstairs to bloom."

It is seldom one has to complain of too much rain in the Dakotas, but we have almost felt like risking a prolonged drought by doing so, this year. After cleaning out our garden on Memorial day, we waited in vain for a time when the soil was dry enough to be hoed till Sunday, June 20th. You gardeners can imagine the wonderful stand we had of weeds, by that time. Some creeping jenny had grown over 3 feet and were coiled around the tomato plants like an octopus. Had it been left to me alone, I probably never would have gotten this 40x100 ft. garden cleaned out, but fortunately I have a very congenial garden partner, a man less than half my age possessing immense strength and great determination, who wields a hoe like one of the perfesh. I figured I could stand it as long as he could, and doubtless he felt he could stand it as long as I could, so finally the garden was cleaned out, the potatoes and squash dusted, with a sign reading Bugs Keep Out, this means you, prominently displayed and our garden conscience will be at ease for another week, at least. Our gardens have been a success this year, with the exception of carrots and parsnips, which seed just refused to do anything, but lie in the garden and rest. Perhaps they were old and feeble or perhaps the carrot seed had heard that the member of the family that most appreciated this vegetable, our Spitz dog, passed on to dog heaven last winter.

Mr. John A. Postlewait, a faithful, long time member from the Rosebud district, writes as follows: "Just pulled your letter out of a pigeon hole, have been so busy its a wonder I ever found the pigeon hole. I live 20 miles southwest of Winner, in the sand, or rather a wide range of different soils. Lived east of Winner in the gumbo for 25 years, so had quite a little experience in it, too. Spring was so late here that plum trees which usually bloom the first week in May didn't bloom till the 15th, when it got so warm that everything bloomed at once. Have a good set of apples and crabs, not so good of plums. I agree with Prof. Yeager that if I had to choose, one kind of crab, it would be the Florence. Have only a young orchard here, most of it too young to bear."

We hope as many as possible will be with us at Vermillion next month. We have always had good meetings there and the large Garden Club is laying themselves out to be nice to us and to make our meeting a success.

Man's very existence on earth depends on the leaves. Harsh sprays or careless spraying, especially in midsummer, can blast, burn, scald, poison or choke them to death.—Tennessee Horticulture.

PRESIDENT'S CORNER

By
H. J. Donaldson



H. J. Donaldson

Well folks, the secretary stepped out and got 3 more annual members which keeps him in first place in this membership race. Mr. W. E. H. Porter sent in one, which we greatly appreciate. Mr. F. X. Wallner threatens to send in a flock of life memberships. When they get here I'll say more power to him. Two of the most distinguished guest speakers on the program of the convention to be held at Vermillion August 23rd and 24th, are Mrs. Frost, President of the National Council of Garden Clubs, Inc., and Mrs. Stadel, Rocky Mountain Regional Vice-President of that same organization. These two people are coming from Arkansas and Kansas respectively, to discuss the possibility of bringing the influence of that great structure to our own Federation of Garden Clubs. Home freezing of fruit and vegetables and the varieties best suited for freezing will be outlined by Mr. Elmer Lundberg of Yankton, who has been making a special study of this subject for some time. The new insecticide D.D.T. with its many possibilities and probabilities, will be discussed by Dr. H. C. Severin of the entomology Department of the Station at Brookings. These are only a few of the high-lights on the program which promises to be one of the most interesting in years. If you can beg, borrow or buy transportation to the convention, you will find Dr. Lantz and Mr. Herrick from Iowa, bringing a new approach to some new ideas. We are planning a special welcome for a car load of members from the Black Hills area, if they can make it. We are sure of delegates from the Rapid City Garden Club, since they are arranging their vacations to coincide with the convention. Three clubs from Sioux Falls and one each from Centerville, Dell Rapids and Brookings, have all promised to send delegates. I hope that the other six clubs can find a way to get some of their members to this first anniversary of the Federation. As the convention date draws nearer, it becomes more evident that the Vermillion Garden club is planning a bang up entertainment for all the delegates.

MORE ABOUT ROSE BUGS

By
A. L. Truax, Crosby, N. D.



A. L. Truax

My article in the March, 1944 number of this magazine, under the caption "Rose Bug Remedy" refers to the rose curculia only, and not to the rose bug proper. The true rose bug, *Anisoplia horticola*, is a beetle about half an inch long and light brown in color, which appears about the time the roses are in bud and feeds upon the buds and flowers. It is quite prevalent in the eastern states, but, so far as I know, has not yet appeared in North Dakota. Unlike the rose bug, which actually devours the buds and blossoms, the rose curculio of which I wrote, has little or no chewing apparatus, and seems to subsist entirely by sucking the juice of the rose buds and tender stems thru its snout or proboscis. I do not know the scientific name of this curculio which infests our North Dakota roses, but it appears to be a close relative of the copper colored weevil, *Curculio cupreus*, which stings plums and apricots in regions where they are grown. Perhaps Dr. Munro, or some other authority, can enlighten us on this point.

(Continued from Page 99)

Horticulturist from Iowa college at Ames, where he was horticulturist with the Iowa Extension Service. He made many friends in his few short years in Manitoba and is highly rated as a horticulturist. To Dr. Sam, we say we regret to see you leave, but the best of luck.

(Continued from Page 104)

special thriving seedling from Rex Pearce, all my rose cushion winter killed in 1942-3. A white fritillary is in bloom altho last fall planted bulbs do not show up, and *Steveniana* rocket is first *Hesperis* out. May 24th. Summer warmth gradually dispels spring chill and leaf buds burst on green ash and the air is laden with fragrance as flowers of currant and crab apples open. The old reliable *baccata* crab festooned with bloom, but few blossoms show on *Dolgo* and those only on the very topmost branches. It is a time of year when us Nature lovers in the Dakotas can in the words of the Good Book, join in Nature's chorus. Rejoice again, I say, Rejoice.



WINTER INJURY TO STRAWBERRIES

By
S. A. McCrory



S. A. McCrory

Our strawberry planting shows some very interesting evidence of winter injury. The project was not designed to measure the value of a mulch covering so the results may not be conclusive. However, there is evidence that a marked varietal difference exists with respect to hardiness.

After harvesting the crop in 1943 the tops were cut from the plants and removed with the mulching material. The ground between the rows was thoroughly cultivated and ample water was supplied for good growth. By the end of the growing season the rows had re-established themselves fairly well. As soon as the plants had entered a dormant stage they were covered with straw mulch to a depth of about three inches. The absence of snow failed to give added protection. High winds blew the mulch off during mid-winter. When it was collected to cover the plants again, a strip through the middle of the planting was left without covering.

Two different types of winter injury are noticeable with strawberries. Killing of fruit buds and crown killing. While it is too early to determine how the yields will compare a marked difference can be noticed in the way particular varieties suffered from winter injury.

It appears that Senator Dunlap was not injured last winter even without mulch protection. Aberdeen survived well but is noticeably better under the mulch. The same was true for Blake-more and Wm. Belt. Other than this there was severe crown injury. It was surprising to see Gem so severely injured. None seem to have been hurt more than Fairfax. Even under the light mulch most of the plants were killed and the few remaining have not blossomed.

To me this does not mean that we are to grow only those varieties that have shown great hardiness. Instead it seems that if we are to grow strawberries we must give them ample winter protection. Without snow covering it is not enough to apply two or three inches of straw mulch. With growers failing to provide winter protection, or perhaps not enough protection, this may explain why Senator Dunlap is so popular.

(Continued from Page 107)

chine broadcasting in flooded fields proved unpleasant and growers called on flyers to do the planting by planes. When the rice ripens the fields are drained and tractor-drawn combines harvest the crop.

(Continued from Page 108)

7. Other Viburnums -- The above Viburnums are the only ones that the author has observed growing under South Dakota conditions. There are many other species such as the Mapleleaf Viburnum (*V. acerifolium*), Hobblebush Viburnum (*V. alnifolium*), Smoketree Viburnum (*V. cotinifolium*), and Mooseberry Viburnum (*V. pauciflorum*) that deserves a through trial.

Keep Your Library Up-To-Date With This
IMPORTANT BOOK
THE BOOK OF GARDEN IMPROVEMENTS
Walter Brett
\$2.50

For the ambitious and more critical gardener, this book suggests attractive and unusual features to make your plot of growing things a real garden. Profusely illustrated with photographs and drawings.

Distributed by
NORTH AND SOUTH DAKOTA
Court House HORTICULTURE Sioux Falls, S. D.

The PIONEER SEED HOUSE

NURSERY-GREENHOUSES OF THE
NORTHWEST

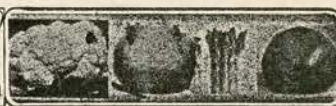
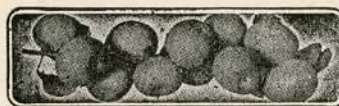
Founded at Bismarck, in Dakota Territory,
in 1882

Specialists in Garden Seeds, Trees, Shrubs,
WILL'S Fruits and Flowers, adapted in
SEEDS Hardiness, Vigor and Drouth Re-
GROW sistance to Dakota conditions.

FREE CATALOG

Ready January 1st of Each Year

OSCAR H. WILL & CO.
BISMARCK, N. D.



CEDAR VARIATION

By

F. L. Skinner, M. B. E., Dropmore, Man., Can.

A recent trip to Eastern Canada brought rather forcibly to my mind the fact that we may not be giving enough attention to the natural variation in some of our native trees and shrubs.

The Arbor Vitae (*Thuja occidentalis*) occurs across Canada from the mouth of the Saskatchewan River in Northern Manitoba to our East Coast. Personally I have seen it in Southeastern Manitoba, and from there through Northern Ontario to the Lake St. John region of Quebec.

In Manitoba and throughout Northern Ontario it is a rather open and somewhat scraggy tree, but in the Ottawa Valley it becomes a dense close pyramid about half as wide as it is high, and as compact as if it had been sheared regularly. This is the type from some considerable distance west of Ottawa right down to Montreal. Then near Lake St. John, Quebec, an entirely different form is found. This form is quite columnar in habit, but unlike the variety known in gardens as *Thuja pyramidalis* it has one central stem, and the branches, which grow straight outward, terminate at from one to two feet from the trunk, according to the size of the tree, and are as even in habit as if regularly clipped.

Another interesting form of one of our Western plants I saw in this region was *Prunus Pennsylvanica* (the Pincherry) growing from 30 to 40 feet high and with a trunk fully 6 inches in diameter.

The Lake St. John region has equally as cold winters as we have in Manitoba, but it has about 10 inches more rain than we have here, mostly in August, Sept. and Oct., so it will be interesting to see if the trees from that district will be hardy with us.

(Continued from Page 102)

sibly the most glistening white among the doubles. Spikes and florets are large. **Mme. Lemoine** is richly scented. **Mme. de Miller** is another double white that is very sweetly scented. **Vestale**, **Mount Blanc**, **Marie Finon** and **Jan Van Tol** rate at the top of the single whites.

Olivier de Serres and **Emile Gentil** continue to satisfy as double kinds. **Condorcet** is another that continues to please here, although not rated in the first group in New England. **Maurice Barres** and **Decaisne** are showy singles.

Victor Lemoine, **Leon Gambetta** and **President Fallieres** are the aristocrats among the double mauves. **Rosace** is luxuriant with huge florets but seems rather floppy, as does **Charles Sargent**

in the bluish class. Among the delighting singles in lilac shades are **Marengo**, **Christophe Colomb**, **Gilbert** and **Jacques Callot**.

Paul Hariot, **Adelaide Dunbar**, and **Archeveque** are double purples. The first mentioned is best known in Manitoba. In single purples there are many grand varieties. Prominent are **Monge**, **Ludwig Spaeth**, **Toussaint L'Ouverture**, **Prodige**, and **Rochambe**.

Richly sweet perfume features the following varieties, **Abel Carriere**, **De Miribel**, **Edith Cavell**, **Georges Bellair**, **Henry Martin**, **Marechal Lannes**, **Maurice de Vilmorin**, **Mme. Lemoine**, **Mme. de Miller**, **President Fallieres**, **President Poincaré** and **Thunberg**.

Lilacs may be planted to advantage during early September. Be certain that the plants are on their own roots. Many nurserymen still use common lilac or white lilac root-stocks upon which to graft the choice improved new varieties. Such plants give unending trouble. The root is likely to overcome the top variety by sucker development. An own-rooted lilac is worth two or three times as much cost price as one grafted on a root of common or white lilac.

A NEW HIGH GRADING POTATO

Mohawk, a new variety of potato, grown under the national potato breeding program sponsored by the U. S. Department of Agriculture, has already made a successful debut while being tested for yield and quality in widely diverse surroundings. By next spring, potato growers in the East will be able to get certified **Mohawk** seed, and by another season American housewives should be on watch for this fine shaped, excellent table potato.

Known until recently only as U.S.D.A. seedling No. 46,000, **Mohawk** originated in Maine in 1935 from a cross between **Green Mountain** and **Katahdin**. It combines many of the best qualities of both parents. The foliage closely resembles **Green Mountain**. The tubers are long, smooth, and high in starch content, and have the high market quality of **Katahdin**. They are mealy and good flavored when baked as **Green Mountain**, and are free from many of the common tuber defects such as sunburn, second growth, misshape, growth cracks, and deep eyes. **Mohawk** is also resistant to mild mosaic and moderately resistant to tip-burn, flea-bee injury, and hopperburn.

Foxtail says: We don't care whether they pronounce it rayshun or rashun. All we want to see is the day when we won't have to hear the word in any pronunciation or language.—**Prairie Farmer**.